



Day : Thursday

Date: 5/6/2004

Time: 14:18:19

## Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name.

Additionally, enter the **first few letters** of the Inventor's First name.

**Last Name****First Name**

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## Refine Search

### Search Results -

Term	Documents
COACERVATE	1733
COACERVATES	532
(COACERVATE AND 10).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	12
(L10 AND (COACERVATE) ).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	12

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L12

Refine Search

Recall Text

Clear

Interrupt

### Search History

DATE: Thursday, May 06, 2004   [Printable Copy](#)   [Create Case](#)

<u>Set</u> <u>Name</u> side by side	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES;</i>			
<i>OP=AND</i>			
<u>L12</u>	L10 and (coacervate)	12	<u>L12</u>
<u>L11</u>	L10 same (coacervate)	3	<u>L11</u>
<u>L10</u>	(crosslinking) same (calcium or (calcium adj chloride))	4177	<u>L10</u>
<u>L9</u>	(coacervate) same ((virus or viral) and (calcium or cation))	1	<u>L9</u>
<u>L8</u>	L4 not L6	54	<u>L8</u>
<u>L7</u>	L6 and L4	2	<u>L7</u>
<u>L6</u>	L5 and coacervate	45	<u>L6</u>

<u>L5</u>	(crosslinked or crosslinking) same (Ca or calcium or cation)	13384	<u>L5</u>
<u>L4</u>	L3 and (crosslinked or crosslinking)	56	<u>L4</u>
<u>L3</u>	(coacervate or coacervation) same (virus or vector or DNA or RNA or (nucleic adj acid))	95	<u>L3</u>
<u>L2</u>	(coacervate adj microsphere)	5	<u>L2</u>
<u>L1</u>	Garver-Robert-I\$.in.	4	<u>L1</u>

END OF SEARCH HISTORY

### Status: Path 1 of [Dialog Information Services via Modem]

### Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)  
Trying 31060000009999...Open

DIALOG INFORMATION SERVICES  
PLEASE LOGON:

\*\*\*\*\* HHHHHHHH SSSSSSSS?

### Status: Signing onto Dialog

\*\*\*\*\*

ENTER PASSWORD:

\*\*\*\*\* HHHHHHHH SSSSSSSS? \*\*\*\*\*

Welcome to DIALOG

### Status: Connected

Dialog level 04.07.01D

Last logoff: 05may04 12:15:51

Logon file001 06may04 15:13:14

\*\*\* ANNOUNCEMENT \*\*\*

\*\*\*

--File 654 - US published applications from March 15, 2001 to the  
present are now online. Please see HELP NEWS 654 for details.

\*\*\*

--File 581 - The 2003 annual reload of Population Demographics is  
complete. Please see Help News581 for details.

\*\*\*

--File 990 - NewsRoom now contains February 2003 to current records.  
File 992 - NewsRoom 2003 archive has been newly created and contains  
records from January 2003. The oldest months's records roll out of  
File 990 and into File 992 on the first weekend of each month.  
To search all 2003 records BEGIN 990, 992, or B NEWS2003, a new  
OneSearch category.

\*\*\*

--Connect Time joins DialUnits as pricing options on Dialog.  
See HELP CONNECT for information.

\*\*\*

\*\*\*

--SourceOne patents are now delivered to your email inbox  
as PDF replacing TIFF delivery. See HELP SOURCE1 for more  
information.

\*\*\*

--Important Notice to Freelance Authors--  
See HELP FREELANCE for more information

\*\*\*

NEW FILES RELEASED

\*\*\*AeroBase (File 104)

\*\*\*DIOGENES: Adverse Drug Events Database (File 181)

\*\*\*World News Connection (File 985)

\*\*\*Dialog NewsRoom - 2003 Archive (File 992)

\*\*\*TRADEMARKSCAN-Czech Republic (File 680)

\*\*\*TRADEMARKSCAN-Hungary (File 681)

\*\*\*TRADEMARKSCAN-Poland (File 682)

\*\*\*

UPDATING RESUMED

\*\*\*

RELOADED

\*\*\*Medline (Files 154-155)

\*\*\*Population Demographics -(File 581)

\*\*\*CLAIMS Citation (Files 220-222)

REMOVED

\*\*\*

>>> Enter BEGIN HOMEBASE for Dialog Announcements <<<  
>>> of new databases, price changes, etc. <<<

\*\*\*\*

KWIC is set to 50.

HIGHLIGHT set on as '\*'

\*

\*

\* ALL NEW CURRENT YEAR RANGES HAVE BEEN \* \* \*

\* \* \* INSTALLED \* \* \*

\*

File 1:ERIC 1966-2004/Apr 29

(c) format only 2004 The Dialog Corporation

Set	Items	Description
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Cost is in DialUnits

?

?b 155, 159, 5, 73

06may04 15:13:30 User259876 Session D619.1

\$0.31 0.088 DialUnits File1

\$0.31 Estimated cost File1

\$0.06 TELNET

\$0.37 Estimated cost this search

\$0.37 Estimated total session cost 0.088 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 155:MEDLINE(R) 1966-2004/May W1

(c) format only 2004 The Dialog Corp.

**\*File 155: Medline has been reloaded. Accession numbers**  
have changed. Please see HELP NEWS 154 for details.

File 159:Cancerlit 1975-2002/Oct

(c) format only 2002 Dialog Corporation

**\*File 159: Cancerlit ceases updating with immediate effect.**  
Please see HELP NEWS.

File 5:Biosis Previews(R) 1969-2004/Apr W4

(c) 2004 BIOSIS

File 73:EMBASE 1974-2004/May W1

(c) 2004 Elsevier Science B.V.

Set	Items	Description
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?s (coacervate (w) microsphere?) (s) (virus or adenovirus or adenoviruses or viral or vector)

476 COACERVATE

50239 MICROSPHERE?

1373770 VIRUS

79288 ADENOVIRUS

17025 ADENOVIRUSES

753966 VIRAL

282328 VECTOR

S1 4 (COACERVATE (W) MICROSPHERE?) (S) (VIRUS OR ADENOVIRUS OR  
ADENOVIRUSES OR VIRAL OR VECTOR)

?rd

...completed examining records

S2 2 RD (unique items)

?t s2/3,k/all

2/3,K/1 (Item 1 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2004 The Dialog Corp. All rts. reserv.

14290013 PMID: 10195878

**Coacervate microspheres as carriers of recombinant \*adenoviruses\*.**

Kalyanasundaram S; Feinstein S; Nicholson J P; Leong K W; Garver R I

Department of Biomedical Engineering, Johns Hopkins University,  
Baltimore, Maryland 21205, USA.

Cancer gene therapy (UNITED STATES) Mar-Apr 1999, 6 (2) p107-12,

ISSN 0929-1903 Journal Code: 9432230

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**Coacervate microspheres as carriers of recombinant \*adenoviruses\*.**

...for bolus administration, both of which limit the efficiency of target tissue infection. As a first step toward overcoming these limitations, rAds were encapsulated in \*coacervate\* \*microspheres\* comprised of gelatin and alginate followed by stabilization with calcium ions. Ultrastructural evaluation showed that the microspheres formed in this manner were 0.8-10 microm in diameter, with viruses evenly distributed. The microspheres achieved a sustained release of \*adenovirus\* with a nominal loss of bioactivity. The pattern of release and the total amount of \*virus\* released was modified by changes in microsphere formulation. Administration of the \*adenovirus\* -containing microspheres to human tumor nodules engrafted in mice showed that the \*viral\* transgene was transferred to the tumor cells. It is concluded that \*coacervate\* \*microspheres\* can be used to encapsulate bioactive rAd and release it in a time-dependent manner.

2/3,K/2 (Item 1 from file: 5)

DIALOG(R) File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0011313709 BIOSIS NO.: 199800107956

**Recombinant adenovirus can be encapsulated and released from \*coacervate\*  
\*microspheres\* in a time-dependent fashion**

AUTHOR: Kalyanasundaram S (Reprint); Feinstein Sharon; Nicholson J P; Leong  
K W (Reprint); Garver R I Jr

AUTHOR ADDRESS: Johns Hopkins Univ., Dep. Biomed. Eng., Baltimore, MD, USA  
\*\*USA

JOURNAL: Cancer Gene Therapy 4 (6 CONF. SUPPL.): pS23 Nov.-Dec., 1997 1997  
MEDIUM: print

CONFERENCE/MEETING: Sixth International Conference on Gene Therapy of  
Cancer San Diego, California, USA November 20-22, 1997; 19971120

ISSN: 0929-1903

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Citation

LANGUAGE: English

**Recombinant adenovirus can be encapsulated and released from \*coacervate\*  
\*microspheres\* in a time-dependent fashion**

?ds

Set	Items	Description
S1	4	(COACERVATE (W) MICROSPHERE?) (S) (VIRUS OR ADENOVIRUS OR - ADENOVIRUSES OR VIRAL OR VECTOR)
S2	2	RD (unique items)
?s (coacervate or coacervation) and (virus or adenovirus or adenoviruses or viral or ve ctor)		
	476	COACERVATE
	922	COACERVATION
	1373770	VIRUS
	79288	ADENOVIRUS
	17025	ADENOVIRUSES
	753966	VIRAL
	282328	VECTOR
S3	21	(COACERVATE OR COACERVATION) AND (VIRUS OR ADENOVIRUS OR ADENOVIRUSES OR VIRAL OR VECTOR)

?rd

...completed examining records

S4 13 RD (unique items)

?s. s4 not s2

13 S4

2 S2

S5

11 S4 NOT S2

?t s5/3,k/all

5/3,K/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2004 The Dialog Corp. All rts. reserv.

14041285 PMID: 9741926

**DNA-polycation nanospheres as non-\*viral\* gene delivery vehicles.**

Leong K W; Mao H Q; Truong-Le V L; Roy K; Walsh S M; August J T

Department of Biomedical Engineering, Johns Hopkins University,  
Baltimore, MD 21205, USA. kleong@bme.jhu.edu

Journal of controlled release - official journal of the Controlled  
Release Society (NETHERLANDS) Apr 30 1998, 53 (1-3) p183-93, ISSN  
0168-3659 Journal Code: 8607908

Contract/Grant No.: CA68011; CA; NCI

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**DNA-polycation nanospheres as non-\*viral\* gene delivery vehicles.**

Nanospheres synthesized by salt-induced complex \*coacervation\* of cDNA  
and polycations such as gelatin and chitosan were evaluated as gene  
delivery vehicles. DNA-nanospheres in the size range of 200-750 nm...

5/3,K/2 (Item 2 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2004 The Dialog Corp. All rts. reserv.

12374782 PMID: 12753728

**Co-encapsulation of two plasmids in chitosan microspheres as a non-\*viral\* gene delivery vehicle.**

Ozbas-Turan Suna; Aral Cenk; Kabasakal Levent; Keyer-Uysal Meral; Akbuga  
Julide

Marmara University, Faculty of Pharmacy, Department of Pharmaceutical  
Biotechnology, Istanbul, Turkey.

Journal of pharmacy & pharmaceutical sciences electronic resource - a  
publication of the Canadian Society for Pharmaceutical Sciences, Societe  
canadienne des sciences pharmaceutiques (Canada) Jan-Apr 2003, 6 (1)  
p27-32, ISSN 1482-1826 Journal Code: 9807281

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**Co-encapsulation of two plasmids in chitosan microspheres as a non-\*viral\* gene delivery vehicle.**

... as chitosan concentration and plasmid DNA amount on in vitro  
properties of microspheres were studied. METHODS: Double plasmid-loaded  
chitosan microspheres were prepared by complex \*coacervation\*. Release  
studies were done in phosphate buffered saline at 37 degrees C and released  
plasmid DNA was determined spectrophotometrically. Integrity of plasmid  
DNAs was checked...

5/3,K/3 (Item 3 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2004 The Dialog Corp. All rts. reserv.

12313833 PMID: 12672602

**Galactosylated low molecular weight chitosan as DNA carrier for  
hepatocyte-targeting.**

Gao Shuying; Chen Jiangning; Xu Xuerong; Ding Zhi; Yang Yong-Hua; Hua Zichun; Zhang Junfeng

State Key Laboratory of Pharmaceutical Biotechnology, Department of Biochemistry, Nanjing University, Nanjing 210093, PR China.

International journal of pharmaceutics (Netherlands) Apr 14 2003, 255 (1-2) p57-68, ISSN 0378-5173 Journal Code: 7804127

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Chitosan has the potential for DNA complexation and is useful as a non-\*viral\* \*vector\* for gene delivery. Highly purified low molecular weight chitosan (LMWC) was prepared. Lactobionic acid (LA) bearing galactose group was coupled with LMWC for liver-specificity...

... series of galactosylated-LMWC (gal-LMWC) samples covering a range of galactose group contents were prepared. The chitosan/DNA complexes were obtained using a complex \*coacervation\* process. Gal-LMWCs were used to transfer pSV-beta-galactosidase reporter gene into human hepatocellular carcinoma cell (HepG2), L-02, SMMC-7721, and human cervix...

... 2,5-diphenyltentraxolium bromide (MTT) assay and the results show that the modified chitosan has relatively low cytotoxicity, giving the evidence that the modified chitosan \*vector\* has the potential to be used as a safe gene-delivery system.

**5/3,K/4 (Item 4 from file: 155)**

DIALOG(R)File 155:MEDLINE(R)

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11310636 PMID: 11397576

**Release kinetics and immunogenicity of parvovirus microencapsulated in PLA/PLGA microspheres.**

Palinko-Biro E; Ronaszeki G; Merkle H P; Gander B

Ceva-Phylaxia Veterinary Biologicals Company, Szallas utca 5, Budapest, 1107, Hungary.

International journal of pharmaceutics (Netherlands) Jun 19 2001, 221 (1-2) p153-7, ISSN 0378-5173 Journal Code: 7804127

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... Cairina moschata) and goose. Inactivated duck parvovirus suspension was microencapsulated into 14-17 kDa poly(lactide) (PLA) and poly(lactide-co-glycolide) (PLGA50:50H) by \*coacervation\*. The in vitro antigen release from individual and mixed PLA and PLGA50:50H microspheres (MS) was biphasic with an initial lag-phase of approx. 10...

... 1+3, the release kinetics could be altered and controlled efficiently. The antigen-loaded MS were injected subcutaneously into ducks. The immune response, expressed as \*virus\* neutralisation (VN) titres, after single administration of MS was modest, i.e. below 200 over the 6 weeks tested, unless the animals were pre-immunised...

Descriptors: Antigens, \*Viral\*--administration and dosage--AD; \*Drug Compounding--methods--MT; \*Lactic Acid; \*Parvovirus--immunology--IM; \*Polyesters; \*Polyglycolic Acid; \*Polymers

Chemical Name: Antigens, \*Viral\*; Biocompatible Materials; Polyesters; Polymers; polylactic acid-polyglycolic acid copolymer; Polyglycolic Acid; poly(lactide); Lactic Acid

**5/3,K/5 (Item 1 from file: 5)**

DIALOG(R)File 5:Biosis Previews(R)

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0013532071 BIOSIS NO.: 200200125582

**Preparation of ionically cross-linked polyphosphazene microspheres by  
\*coacervation\***

AUTHOR: Andrianov A K; Chen J

AUTHOR ADDRESS: Belmont, Mass., USA\*\*USA

JOURNAL: Official Gazette of the United States Patent and Trademark Office  
Patents 1214 (3): p2918 Sept. 15, 1998 1998

MEDIUM: print

PATENT NUMBER: US 5807757 PATENT DATE GRANTED: Sept. 15, 1998 19980915

PATENT CLASSIFICATION: 436-535 PATENT ASSIGNEE: \*VIRUS\* RESEARCH

INSTITUTE, INC. PATENT COUNTRY: USA

ISSN: 0098-1133

DOCUMENT TYPE: Patent

RECORD TYPE: Citation

LANGUAGE: English

**Preparation of ionically cross-linked polyphosphazene microspheres by  
\*coacervation\***

PATENT ASSIGNEE: \*VIRUS\* RESEARCH INSTITUTE, INC.

DESCRIPTORS:

MISCELLANEOUS TERMS: ...\*COACERVATION\*;

**5/3,K/6 (Item 2 from file: 5)**

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0012927548 BIOSIS NO.: 200100099387

**Ganciclovir-loaded albumin nanoparticles: Characterization and in vitro  
release properties**

AUTHOR: Merodio Marta; Arnedo Amaia; Renedo M Jesus; Irache Juan M  
(Reprint)

AUTHOR ADDRESS: Centro Galenico, Universidad de Navarra, C/Irunlarrea s/n.,  
31080, Pamplona, Spain\*\*Spain

JOURNAL: European Journal of Pharmaceutical Sciences 12 (3): p251-259  
January, 2001 2001

MEDIUM: print

ISSN: 0928-0987

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: to characterise and in vitro evaluate the drug release properties of three different formulations of ganciclovir-loaded albumin nanoparticles. These carriers were prepared by a \*coacervation\* method and chemical cross-linking with glutaraldehyde. Depending on the step where the drug and/or cross-linking agent were added three different formulations were...

...of nanoparticulate formulations, the drug was added to a solution of albumin (model B) and glutaraldehyde (model C) prior the formation of the carriers by \*coacervation\*. In all cases, the size of the different nanoparticulate formulations was comprised between 200 and 400 nm and the yield ranged from 50%, in model...

DESCRIPTORS:

...DISEASES: \*viral\* disease

**5/3,K/7 (Item 3 from file: 5)**

DIALOG(R)File 5:Biosis Previews(R)

(c) 2004 BIOSIS. All rts. reserv.

0012517131 BIOSIS NO.: 200000235444

**Antigen-specific induction of peripheral T cell tolerance in vivo by  
codelivery of DNA vectors encoding antigen and Fas ligand**

AUTHOR: Georgantas Robert W III (Reprint); Leong Kam W; August J Thomas

AUTHOR ADDRESS: 725 North Wolfe Street, Room 311, Biophysics Building,

Baltimore, MD, 21205, USA\*\*USA  
JOURNAL: Human Gene Therapy 11 (6): p851-858 April 10, 2000 2000  
MEDIUM: print  
ISSN: 1043-0342  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English

...ABSTRACT: individual antigen-presenting cells would lead to antigen-specific activation of T cells and to their consequent deletion by FasL-mediated AICD. A DNA-gelatin \*coacervate\* containing transferrin cell ligand, calcium, and the lysosomotropic agent chloroquine, a formulation previously shown to achieve high-level transfection of immune and muscle cells in...

DESCRIPTORS:

CHEMICALS & BIOCHEMICALS: ...\*vector\*; ...

...plasmid, \*vector\*; ...

...plasmid, \*vector\*;

METHODS & EQUIPMENT: DNA-gelatin \*coacervate\*--....

...DNA transfer method, \*vector\*;

5/3,K/8 (Item 4 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0009214073 BIOSIS NO.: 199497235358

**Gelatin microspheres as a new approach for the controlled delivery of synthetic oligonucleotides and PCR-generated DNA fragments**

AUTHOR: Cortesi Rita; Esposito Elisabetta; Menegatti Enea; Gambari Roberto; Nastruzzi Claudio (Reprint)

AUTHOR ADDRESS: Dep. Pharmaceutical Sci., Ferrara Univ., Via Fossato di Mortara 19, I-44100 Ferrara, Italy\*\*Italy

JOURNAL: International Journal of Pharmaceutics (Amsterdam) 105 (2): p 181-186 1994 1994

ISSN: 0378-5173

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: length, prepared by the polymerase chain reaction (PCR) mimicking a region of the HIV-1 LTR (dsDNA-144). Spherical gelatin microspheres were obtained by a \*coacervation\* method, showing a high percentage of encapsulation yields (over 85%). Size distribution analysis of the microspheres produced resulted in an average diameter of 22 mu...

DESCRIPTORS:

...ORGANISMS: human immunodeficiency \*virus\*-type 1 (Retroviridae)

MISCELLANEOUS TERMS: ...\*COACERVATION\* METHOD

5/3,K/9 (Item 5 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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0002727545 BIOSIS NO.: 197968039044

**BIOPHYSICAL ASPECTS 3 OF MULTI MOLECULAR PROTEIN STRUCTURES \*COACERVATION\* MEMBRANES AND FIBERS**

BOOK TITLE: BIOPHYSICAL ASPECTS 3 OF MULTI MOLECULAR PROTEIN STRUCTURES

**\*COACERVATION\* MEMBRANES AND FIBERS**

AUTHOR: SEGAL J; KALAJDIEW A

p124

DOCUMENT TYPE: Book

RECORD TYPE: Abstract

LANGUAGE: GERMAN

BIOPHYSICAL ASPECTS 3 OF MULTI MOLECULAR PROTEIN STRUCTURES \*COACERVATION\*  
MEMBRANES AND FIBERS

BOOK TITLE: BIOPHYSICAL ASPECTS 3 OF MULTI MOLECULAR PROTEIN STRUCTURES  
\*COACERVATION\* MEMBRANES AND FIBERS

...ABSTRACT: of protein molecules and their metabolism and the role of the pleated drum model. Other chapters examine globular proteins in solution, the physical chemistry of \*coacervation\*, \*coacervation\* features of hyaloplasm, physical chemistry of membrane growth, structure and functional parameters of biomembrane, biomembrane modeling, structural changes in protein-lipid membrane, transport through membranes, fiber-producing globular proteins and spontaneous reconstruction of supramolecular protein structures. Examples from research on \*viral\*, bacterial and animal protein are included.

5/3,K/10 (Item 1 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2004 Elsevier Science B.V. All rts. reserv.

12559683 EMBASE No: 2004152006

**Chitosan Nanoparticles for Plasmid DNA Delivery: Effect of Chitosan Molecular Structure on Formulation and Release Characteristics**

Bozkir A.; Saka O.M.

A. Bozkir, Dept. of Pharmaceutical Technology, Faculty of Pharmacy, Ankara University, 06100, Tandogan, Ankara Turkey

AUTHOR EMAIL: bozkir@pharmacy.ankara.edu.tr

Drug Delivery: Journal of Delivery and Targeting of Therapeutic Agents ( DRUG DELIV. J. DELIV. TARGETING THER. AGENTS ) (United States) 2004, 11/2 (107-112)

CODEN: DDELE ISSN: 1071-7544

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 17

Chitosan can be useful as a nonviral \*vector\* for gene delivery. Although there are several reports to form chitosan-pDNA particles, the optimization and effect on transfection remain insufficient. The chitosan-pDNA nanoparticles were formulated using complex \*coacervation\* and solvent evaporation techniques. The important parameters for the encapsulation efficiency were investigated, including molecular weight and deacetylation degree of chitosan. We found that encapsulation...

...chitosan. DNA-nanoparticles in the size range of 450-820 nm depend on the formulation process. The surface charge of the nanoparticles prepared with complex \*coacervation\* method was slightly positive with a zeta potential of +9 to +18 mV; nevertheless, nanoparticles prepared with solvent evaporation method had a zeta potential (similar...

...encapsulation efficiency protect the encapsulated pDNA from nuclease degradation as shown by electrophoretic mobility analysis. The release of pDNA from the formulation prepared by complex \*coacervation\* was completed in 24 hr whereas the formulation prepared by evaporation technique released pDNA in 96 hr, but these release profiles are not statistically significant compared with formulations with similar structure ( $p > .05$ ). According to the results, we suggest nanoparticles have the potential to be used as a transfer \*vector\* in further studies.

MEDICAL DESCRIPTORS:

nonviral gene delivery system; DNA transfection; encapsulation; deacetylation; surface charge; zeta potential; drug synthesis; electrophoretic mobility; intermethod comparison; DNA \*vector\*; in vitro study; drug stability; article; priority journal

MEDICAL TERMS (UNCONTROLLED): solvent evaporation method; complex \*coacervation\* method

5/3,K/11 (Item 2 from file: 73)  
DIALOG(R)File 73:EMBASE  
(c) 2004 Elsevier Science B.V. All rts. reserv.

11593393 EMBASE No: 2002164894

**Efficacy of ganciclovir-loaded nanoparticles in human cytomegalovirus (HCMV)-infected cells**

Merodio M.; Socorro Espuelas M.; Mirshahi M.; Arnedo A.; Irache J.M.  
J.M. Irache, Centro Galenico, Universidad de Navarra, Pamplona 31080  
Spain

AUTHOR EMAIL: jmirache@unav.es

Journal of Drug Targeting ( J. DRUG TARGETING ) (United Kingdom) 2002,  
10/3 (231-238)

CODEN: JDТАЕ ISSN: 1061-186X

DOCUMENT TYPE: Journal ; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 27

...GCV was adsorbed onto preformed protein nanoparticles (Np A) or incubated with the albumin solution prior to the formation of nanoparticles (Np B) by a \*coacervation\* method. The antiviral efficacies in MRC-5 and CHN cells were assayed by plaque reduction assay and early antigen detection, with several MOI and time...

**DRUG DESCRIPTORS:**

albumin; \*virus\* antigen--endogenous compound--ec; antiviral agent--drug concentration--cr; antiviral agent--drug development--dv; antiviral agent --pharmaceutics--pr; antiviral agent--pharmacology--pd

**MEDICAL DESCRIPTORS:**

drug efficacy; nanoparticle; drug potentiation; antiviral activity; cytotoxicity; drug absorption; drug synthesis; \*coacervation\*; cell line; cornea stroma; lung fibroblast; drug determination; \*virus\* plaque; antigen detection; drug activity; drug formulation; dose time effect relation; correlation analysis; drug uptake; human; controlled study; human cell; article; priority journal

?ds

Set	Items	Description
S1	4	(COACERVATE (W) MICROSPHERE?) (S) (VIRUS OR ADENOVIRUS OR - ADENOVIRUSES OR VIRAL OR VECTOR)
S2	2	RD (unique items)
S3	21	(COACERVATE OR COACERVATION) AND (VIRUS OR ADENOVIRUS OR A- DENOVIRUSES OR VIRAL OR VECTOR)
S4	13	RD (unique items)
S5	11	S4 NOT S2
?s		(crosslinking or crosslinked) (s) (calcium or cation)
	21826	CROSSLINKING
	11679	CROSSLINKED
	1023841	CALCIUM
	105305	CATION
S6	1455	(CROSSLINKING OR CROSSLINKED) (S) (CALCIUM OR CATION)
?s s6	(s)	(coacervate?)
	1455	S6
	662	COACERVATE?
S7	3	S6 (S) (COACERVATE?)
?rd		
...completed		examining records
S8	1	RD (unique items)
?t s8/3,k/all		

8/3,K/1 (Item 1 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)  
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14185207 PMID: 9882427

**Gene transfer by DNA-gelatin nanospheres.**

Truong-Le V L; Walsh S M; Schweibert E; Mao H Q; Guggino W B; August J T;  
Leong K W

Department of Pharmacology and Molecular Sciences, Johns Hopkins School of Medicine, Baltimore, Maryland, 21205, USA.

Archives of biochemistry and biophysics (UNITED STATES) Jan 1 1999,  
361 (1) p47-56, ISSN 0003-9861 Journal Code: 0372430  
Contract/Grant No.: 1 R01 A141908; PHS; CA 68011; CA; NCI  
Document type: Journal Article  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: Completed

A DNA and gelatin nanoparticle \*coacervate\* containing chloroquine and \*calcium\* , and with the cell ligand transferrin covalently bound to the gelatin, has been developed as a gene delivery vehicle. In this study, the coacervation conditions...

... nanoparticles are defined. Nanospheres formed within a narrow range of DNA concentrations and achieved incorporation of more than 98% of the DNA in the reaction. \*Crosslinking\* of gelatin to stabilize the particles does not effect the electrophoretic mobility of the DNA. DNA in the nanosphere is partially resistant to digestion with...

... in extensive degradation of free DNA but is completely degraded by high concentrations of DNase. Optimum cell transfection by nanosphere DNA required the presence of \*calcium\* and nanospheres containing transferrin. The biological integrity of the nanosphere DNA was demonstrated with a model system utilizing DNA encoding the cystic fibrosis transport regulator

...  
?ds

Set	Items	Description
S1	4	(COACERVATE (W) MICROSPHERE?) (S) (VIRUS OR ADENOVIRUS OR - ADENOVIRUSES OR VIRAL OR VECTOR)
S2	2	RD (unique items)
S3	21	(COACERVATE OR COACERVATION) AND (VIRUS OR ADENOVIRUS OR A- DENOVIRUSES OR VIRAL OR VECTOR)
S4	13	RD (unique items)
S5	11	S4 NOT S2
S6	1455	(CROSSLINKING OR CROSSLINKED) (S) (CALCIUM OR CATION)
S7	3	S6 (S) (COACERVATE?)
S8	1	RD (unique items)
?s s6 and (coacervate or coacervates)		
	1455	S6
	476	COACERVATE
	213	COACERVATES
S9	3	S6 AND (COACERVATE OR COACERVATES)

?rd

...completed examining records

S10 1 RD (unique items)

?t s10/3,k/all

10/3,K/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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14185207 PMID: 9882427

**Gene transfer by DNA-gelatin nanospheres.**

Truong-Le V L; Walsh S M; Schweibert E; Mao H Q; Guggino W B; August J T; Leong K W

Department of Pharmacology and Molecular Sciences, Johns Hopkins School of Medicine, Baltimore, Maryland, 21205, USA.

Archives of biochemistry and biophysics (UNITED STATES) Jan 1 1999,  
361 (1) p47-56, ISSN 0003-9861 Journal Code: 0372430  
Contract/Grant No.: 1 R01 A141908; PHS; CA 68011; CA; NCI  
Document type: Journal Article  
Languages: ENGLISH  
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... nanoparticles are defined. Nanospheres formed within a narrow range of DNA concentrations and achieved incorporation of more than 98% of the DNA in the reaction. \*Crosslinking\* of gelatin to stabilize the particles does not effect the electrophoretic mobility of the DNA. DNA in the nanosphere is partially resistant to digestion with...

... in extensive degradation of free DNA but is completely degraded by high concentrations of DNase. Optimum cell transfection by nanosphere DNA required the presence of \*calcium\* and nanospheres containing transferrin. The biological integrity of the nanosphere DNA was demonstrated with a model system utilizing DNA encoding the cystic fibrosis transport regulator

...  
?ds

Set	Items	Description
S1	4	(COACERVATE (W) MICROSPHERE?) (S) (VIRUS OR ADENOVIRUS OR - ADENOVIRUSES OR VIRAL OR VECTOR)
S2	2	RD (unique items)
S3	21	(COACERVATE OR COACERVATION) AND (VIRUS OR ADENOVIRUS OR A- ADENOVIRUSES OR VIRAL OR VECTOR)
S4	13	RD (unique items)
S5	11	S4 NOT S2
S6	1455	(CROSSLINKING OR CROSSLINKED) (S) (CALCIUM OR CATION)
S7	3	S6 (S) (COACERVATE?)
S8	1	RD (unique items)
S9	3	S6 AND (COACERVATE OR COACERVATES)
S10	1	RD (unique items)
?s s6 and s3		
	1455	S6
	21	S3
S11	0	S6 AND S3
?s (crosslinking (w) agent) (s) (calcium (w) chloride)		
	21826	CROSSLINKING
	1342424	AGENT
	1023841	CALCIUM
	455938	CHLORIDE
S12	6	(CROSSLINKING (W) AGENT) (S) (CALCIUM (W) CHLORIDE)
?rd		
...completed examining records		
S13	3	RD (unique items)
?t s13/3,k/all		

13/3,K/1 (Item 1 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)  
(c) format only 2004 The Dialog Corp. All rts. reserv.

11965753 PMID: 12176253

**Drug release properties of pectinate microspheres prepared by emulsification method.**

Wong T; Lee H; Chan L; Heng P  
Department of Pharmacy, Faculty of Science, National University of Singapore, 18 Science Drive 4, S117543, Singapore, Singapore.

International journal of pharmaceutics (Netherlands) Aug 21 2002, 242 (1-2) p233-7, ISSN 0378-5173 Journal Code: 7804127

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... in making microspheres for sustained-release of drugs. The pectin microspheres were prepared by external gelation using an emulsification

technique with calcium chloride as the \*crosslinking\* \*agent\* . The influences of drug core (sulphanilamide, sulphaguanidine and sulphathiazole) and dissolution media (distilled water, USP HCl and phosphate buffers) on the drug release properties of...

13/3,K/2 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0011800312 BIOSIS NO.: 199900059972

**Mechanical and thermomechanical properties of films based on whey proteins as affected by plasticizer and crosslinking agents**

AUTHOR: Galietta Giovani; Di Gioia Lodovico; Guilbert Stephane; Cuq Bernard (Reprint)

AUTHOR ADDRESS: Ecole Natl. Superieure Agronomique Montpellier, 2 Place Viala, 34060 Montpellier, Cedex 1, France\*\*France

JOURNAL: Journal of Dairy Science 81 (12): p3123-3130 Dec., 1998 1998

MEDIUM: print

ISSN: 0022-0302

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: in water and decreased the mechanical resistance, apparent Young modulus, and glass transition temperature of the whey protein films. The incorporation of formaldehyde as a \*crosslinking\* \*agent\* enhanced the mechanical properties and insolubility behavior and increased the glass transition temperature. The addition of a low concentration of CaCl<sub>2</sub> in the film formulation...

13/3,K/3 (Item 2 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
(c) 2004 BIOSIS. All rts. reserv.

0010780330 BIOSIS NO.: 199799414390

**Mechanical, water uptake and permeability properties of crosslinked chitosan glutamate and alginate films**

AUTHOR: Remunan-Lopez Carmen (Reprint); Bodmeier Roland

AUTHOR ADDRESS: Dep. Pharmaceutical Technol., Fac. Pharmacy, Univ. Santiago de Compostela, Santiago de Compostela, Spain\*\*Spain

JOURNAL: Journal of Controlled Release 44 (2-3): p215-225 1997 1997

ISSN: 0168-3659

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: The crosslinked films were water-insoluble but permeable to water vapor. The water vapor transmission rate of chitosan films linearly decreased with increasing concentration of \*crosslinking\* \*agent\*. An optimum \*crosslinking\* \*agent\* concentration was found with alginate. Wet alginate films had lower puncture strength and higher elongation values when compared with dry films the mechanical properties were...

...varied with pH and CaCl<sub>2</sub> concentration. Chitosan films showed swelling and permeability characteristics, which were dependent on pH and on the concentration of the \*crosslinking\* \*agent\*. Diffusion of chlorpheniramine maleate through chitosan films increased with increasing concentration of glycerin.

?ds

Set	Items	Description
S1	4	(COACERVATE (W) MICROSPHERE?) (S) (VIRUS OR ADENOVIRUS OR - ADENOVIRUSES OR VIRAL OR VECTOR)
S2	2	RD (unique items)
S3	21	(COACERVATE OR COACERVATION) AND (VIRUS OR ADENOVIRUS OR A-

DENOVIRUSES OR VIRAL OR VECTOR)  
 S4 13 RD (unique items)  
 S5 11 S4 NOT S2  
 S6 1455 (CROSSLINKING OR CROSSLINKED) (S) (CALCIUM OR CATION)  
 S7 3 S6 (S) (COACERVATE?)  
 S8 1 RD (unique items)  
 S9 3 S6 AND (COACERVATE OR COACERVATES)  
 S10 1 RD (unique items)  
 S11 0 S6 AND S3  
 S12 6 (CROSSLINKING (W) AGENT) (S) (CALCIUM (W) CHLORIDE)  
 S13 3 RD (unique items)  
 ?s (microsphere or microspheres) (s) (virus or adenovirus or adenoviruses or viral or v  
 ector)  
 20699 MICROSPHERE  
 41109 MICROSPHERES  
 1373770 VIRUS  
 79288 ADENOVIRUS  
 17025 ADENOVIRUSES  
 753966 VIRAL  
 282328 VECTOR  
 S14 500 (MICROSPHERE OR MICROSPHERES) (S) (VIRUS OR ADENOVIRUS OR  
 ADENOVIRUSES OR VIRAL OR VECTOR)  
 ?s s14 and (coacervate? or coacervation)  
 500 S14  
 662 COACERVATE?  
 922 COACERVATION  
 S15 8 S14 AND (COACERVATE? OR COACERVATION)  
 ?rd  
 ...completed examining records  
 S16 4 RD (unique items)  
 ?t s16/3,k/all

16/3,K/1 (Item 1 from file: 155)  
 DIALOG(R)File 155:MEDLINE(R)  
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14290013 PMID: 10195878

**\*Coacervate\* \*microspheres\* as carriers of recombinant \*adenoviruses\*.**  
 Kalyanasundaram S; Feinstein S; Nicholson J P; Leong K W; Garver R I  
 Department of Biomedical Engineering, Johns Hopkins University,  
 Baltimore, Maryland 21205, USA.  
 Cancer gene therapy (UNITED STATES) Mar-Apr 1999, 6 (2) p107-12,  
 ISSN 0929-1903 Journal Code: 9432230  
 Document type: Journal Article  
 Languages: ENGLISH  
 Main Citation Owner: NLM  
 Record type: Completed

**\*Coacervate\* \*microspheres\* as carriers of recombinant \*adenoviruses\*.**  
 The therapeutic utility of recombinant \*adenoviruses\* (rAds) is limited  
 in part by difficulties in directing the viruses to specific sites and by  
 the requirement for bolus administration, both of which limit the  
 efficiency of target tissue infection. As a first step toward overcoming  
 these limitations, rAds were encapsulated in \*coacervate\* \*microspheres\*  
 comprised of gelatin and alginate followed by stabilization with calcium  
 ions. Ultrastructural evaluation showed that the \*microspheres\* formed in  
 this manner were 0.8-10 microm in diameter, with viruses evenly  
 distributed. The \*microspheres\* achieved a sustained release of  
 \*adenovirus\* with a nominal loss of bioactivity. The pattern of release and  
 the total amount of \*virus\* released was modified by changes in  
 \*microsphere\* formulation. Administration of the \*adenovirus\*-containing  
 \*microspheres\* to human tumor nodules engrafted in mice showed that the  
 \*viral\* transgene was transferred to the tumor cells. It is concluded that  
 \*coacervate\* \*microspheres\* can be used to encapsulate bioactive rAd and  
 release it in a time-dependent manner.



16/3,K/2 (Item 2 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)  
(c) format only 2004 The Dialog Corp. All rts. reserv.

12374782 PMID: 12753728

**Co-encapsulation of two plasmids in chitosan \*microspheres\* as a non-viral\* gene delivery vehicle.**

Ozbas-Turan Suna; Aral Cenk; Kabasakal Levent; Keyer-Uysal Meral; Akbuga Julide

Marmara University, Faculty of Pharmacy, Department of Pharmaceutical Biotechnology, Istanbul, Turkey.

Journal of pharmacy & pharmaceutical sciences electronic resource - a publication of the Canadian Society for Pharmaceutical Sciences, Societe canadienne des sciences pharmaceutiques (Canada) Jan-Apr 2003, 6 (1) p27-32, ISSN 1482-1826 Journal Code: 9807281

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**Co-encapsulation of two plasmids in chitosan \*microspheres\* as a non-viral\* gene delivery vehicle.**

... as chitosan concentration and plasmid DNA amount on in vitro properties of microspheres were studied. METHODS: Double plasmid-loaded chitosan microspheres were prepared by complex \*coacervation\*. Release studies were done in phosphate buffered saline at 37 degrees C and released plasmid DNA was determined spectrophotometrically. Integrity of plasmid DNAs was checked...

16/3,K/3 (Item 3 from file: 155)  
DIALOG(R) File 155:MEDLINE(R)  
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11310636 PMID: 11397576

**Release kinetics and immunogenicity of parvovirus microencapsulated in PLA/PLGA microspheres.**

Palinko-Biro E; Ronaszeki G; Merkle H P; Gander B

Ceva-Phylaxia Veterinary Biologicals Company, Szallas utca 5, Budapest, 1107, Hungary.

International journal of pharmaceutics (Netherlands) Jun 19 2001, 221 (1-2) p153-7, ISSN 0378-5173 Journal Code: 7804127

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... Cairina moschata) and goose. Inactivated duck parvovirus suspension was microencapsulated into 14-17 kDa poly(lactide) (PLA) and poly(lactide-co-glycolide) (PLGA50:50H) by \*coacervation\*. The in vitro antigen release from individual and mixed PLA and PLGA50:50H \*microspheres\* (MS) was biphasic with an initial lag-phase of approx. 10 days followed by a relatively constant release over additional 12 days. By varying the...

... 1+3, the release kinetics could be altered and controlled efficiently. The antigen-loaded MS were injected subcutaneously into ducks. The immune response, expressed as \*virus\* neutralisation (VN) titres, after single administration of MS was modest, i.e. below 200 over the 6 weeks tested, unless the animals were pre-immunised...

16/3,K/4 (Item 1 from file: 5)  
DIALOG(R) File 5:Biosis Previews(R)  
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0011313709 BIOSIS NO.: 199800107956

**Recombinant \*adenovirus\* can be encapsulated and released from \*coacervate\***

**\*microspheres\* in a time-dependent fashion**

AUTHOR: Kalyanasundaram S (Reprint); Feinstein Sharon; Nicholson J P; Leong K W (Reprint); Garver R I Jr  
AUTHOR ADDRESS: Johns Hopkins Univ., Dep. Biomed. Eng., Baltimore, MD, USA  
\*\*USA  
JOURNAL: Cancer Gene Therapy 4 (6 CONF. SUPPL.): pS23 Nov.-Dec., 1997 1997  
MEDIUM: print  
CONFERENCE/MEETING: Sixth International Conference on Gene Therapy of Cancer San Diego, California, USA November 20-22, 1997; 19971120  
ISSN: 0929-1903  
DOCUMENT TYPE: Meeting; Meeting Abstract  
RECORD TYPE: Citation  
LANGUAGE: English

**Recombinant \*adenovirus\* can be encapsulated and released from \*coacervate\*  
\*microspheres\* in a time-dependent fashion**

DESCRIPTORS:

MISCELLANEOUS TERMS: \*coacervate\* microspheres...

?ds

Set	Items	Description
S1	4	(COACERVATE (W) MICROSPHERE?) (S) (VIRUS OR ADENOVIRUS OR - ADENOVIRUSES OR VIRAL OR VECTOR)
S2	2	RD (unique items)
S3	21	(COACERVATE OR COACERVATION) AND (VIRUS OR ADENOVIRUS OR A- DENOVIRUSES OR VIRAL OR VECTOR)
S4	13	RD (unique items)
S5	11	S4 NOT S2
S6	1455	(CROSSLINKING OR CROSSLINKED) (S) (CALCIUM OR CATION)
S7	3	S6 (S) (COACERVATE?)
S8	1	RD (unique items)
S9	3	S6 AND (COACERVATE OR COACERVATES)
S10	1	RD (unique items)
S11	0	S6 AND S3
S12	6	(CROSSLINKING (W) AGENT) (S) (CALCIUM (W) CHLORIDE)
S13	3	RD (unique items)
S14	500	(MICROSPHERE OR MICROSPHERES) (S) (VIRUS OR ADENOVIRUS OR - ADENOVIRUSES OR VIRAL OR VECTOR)
S15	8	S14 AND (COACERVATE? OR COACERVATION)
S16	4	RD (unique items)
?s (crosslinking (w) agent) (s) (coacervate? or coacervation)		
	21826	CROSSLINKING
	1342424	AGENT
	662	COACERVATE?
	922	COACERVATION
S17	2	(CROSSLINKING (W) AGENT) (S) (COACERVATE? OR COACERVATION)

?rd

...completed examining records

S18 1 RD (unique items)

?t s18/3,k/all

**18/3,K/1 (Item 1 from file: 155)**

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2004 The Dialog Corp. All rts. reserv.

12852925 PMID: 8562517

**Microcapsules obtained from complex coacervation of collagen and chondroitin sulfate.**

Shao W; Leong K W

Department of Biomedical Engineering, School of Medicine, Johns Hopkins University, Baltimore, MD 21218, USA.

Journal of biomaterials science. Polymer edition (NETHERLANDS) 1995, 7 (5) p389-99, ISSN 0920-5063 Journal Code: 9007393

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... model protein was encapsulated with a loading level of up to 95% by weight. Degradation rate of the microcapsules decreased with the concentration of the \*crosslinking\* \*agent\* glutaraldehyde and increased with the bacterial collagenase level. Correspondingly the release of albumin could also be varied by the cross-linking degree of the microcapsules.

?ds

Set	Items	Description
S1	4	(COACERVATE (W) MICROSPHERE?) (S) (VIRUS OR ADENOVIRUS OR - ADENOVIRUSES OR VIRAL OR VECTOR)
S2	2	RD (unique items)
S3	21	(COACERVATE OR COACERVATION) AND (VIRUS OR ADENOVIRUS OR A- DENOVIRUSES OR VIRAL OR VECTOR)
S4	13	RD (unique items)
S5	11	S4 NOT S2
S6	1455	(CROSSLINKING OR CROSSLINKED) (S) (CALCIUM OR CATION)
S7	3	S6 (S) (COACERVATE?)
S8	1	RD (unique items)
S9	3	S6 AND (COACERVATE OR COACERVATES)
S10	1	RD (unique items)
S11	0	S6 AND S3
S12	6	(CROSSLINKING (W) AGENT) (S) (CALCIUM (W) CHLORIDE)
S13	3	RD (unique items)
S14	500	(MICROSPHERE OR MICROSPHERES) (S) (VIRUS OR ADENOVIRUS OR - ADENOVIRUSES OR VIRAL OR VECTOR)
S15	8	S14 AND (COACERVATE? OR COACERVATION)
S16	4	RD (unique items)
S17	2	(CROSSLINKING (W) AGENT) (S) (COACERVATE? OR COACERVATION)
S18	1	RD (unique items)

?s (crosslinking (w) agent) and (coacervate or coacervation)

21826 CROSSLINKING

1342424 AGENT

1109 CROSSLINKING(W)AGENT

476 COACERVATE

922 COACERVATION

S19 5 (CROSSLINKING (W) AGENT) AND (COACERVATE OR COACERVATION)

?rd

...completed examining records

S20 2 RD (unique items)

?s s20 not s18

2 S20

1 S18

S21 1 S20 NOT S18

?t s21/3,k/all

21/3,K/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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10364249 PMID: 7532861

**Preparation of sterically stabilized human serum albumin nanospheres using a novel Dextranox-MPEG \*crosslinking\* \*agent\*.**

Lin W; Coombes A G; Garnett M C; Davies M C; Schacht E; Davis S S; Illum L

Department of Pharmaceutical Sciences, University of Nottingham, University Park, UK.

Pharmaceutical research (UNITED STATES) Nov 1994, 11 (11) p1588-92,

ISSN 0724-8741 Journal Code: 8406521

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

**Preparation of sterically stabilized human serum albumin nanospheres**

using a novel Dextranox-MPEG \*crosslinking\* \*agent\*.

Human serum albumin (HSA) nanospheres with a size less than 200 nm in diameter were prepared using a modified \*coacervation\* method and crosslinking with methyl polyethylene glycol modified oxidized Dextran (Dextranox-MPEG) which created a sterically stabilizing polyethylene oxide surface layer surrounding the nanospheres. The...

?ds

Set	Items	Description
S1	4	(COACERVATE (W) MICROSPHERE?) (S) (VIRUS OR ADENOVIRUS OR - ADENOVIRUSES OR VIRAL OR VECTOR)
S2	2	RD (unique items)
S3	21	(COACERVATE OR COACERVATION) AND (VIRUS OR ADENOVIRUS OR A- DENOVIRUSES OR VIRAL OR VECTOR)
S4	13	RD (unique items)
S5	11	S4 NOT S2
S6	1455	(CROSSLINKING OR CROSSLINKED) (S) (CALCIUM OR CATION)
S7	3	S6 (S) (COACERVATE?)
S8	1	RD (unique items)
S9	3	S6 AND (COACERVATE OR COACERVATES)
S10	1	RD (unique items)
S11	0	S6 AND S3
S12	6	(CROSSLINKING (W) AGENT) (S) (CALCIUM (W) CHLORIDE)
S13	3	RD (unique items)
S14	500	(MICROSPHERE OR MICROSPHERES) (S) (VIRUS OR ADENOVIRUS OR - ADENOVIRUSES OR VIRAL OR VECTOR)
S15	8	S14 AND (COACERVATE? OR COACERVATION)
S16	4	RD (unique items)
S17	2	(CROSSLINKING (W) AGENT) (S) (COACERVATE? OR COACERVATION)
S18	1	RD (unique items)
S19	5	(CROSSLINKING (W) AGENT) AND (COACERVATE OR COACERVATION)
S20	2	RD (unique items)
S21	1	S20 NOT S18

?logout

06may04 15:31:32 User259876 Session D619.2  
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\$1.05 0.355 DialUnits File159  
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\$7.78 1.389 DialUnits File5  
\$15.75 9 Type(s) in Format 3  
\$15.75 9 Types  
\$23.53 Estimated cost File5  
\$11.47 1.171 DialUnits File73  
\$5.40 2 Type(s) in Format 3  
\$5.40 2 Types  
\$16.87 Estimated cost File73  
OneSearch, 4 files, 3.964 DialUnits FileOS  
\$4.74 TELNET  
\$52.28 Estimated cost this search  
\$52.65 Estimated total session cost 4.052 DialUnits

### Status: Signed Off. (19 minutes)